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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,721	01/10/2001	Nicholas F. Borrelli	SP00-080	3514

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CORNING INCORPORATED
SP-TI-3-1
CORNING, NY 14831

EXAMINER

HOFFMANN, JOHN M

ART UNIT PAPER NUMBER

1731

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/675,721

Applicant(s)

BORRELLI ET AL.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-19, 25-38, 40-43, 46 and 47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-19, 40, 42 and 46 is/are allowed.
- 6) ☒ Claim(s) 25-35, 38, 41, 43 and 47 is/are rejected.
- 7) ☒ Claim(s) 36 and 37 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Allowable Subject Matter

Claims 16-19, 40, 42, and 46 are allowed.

Claims 36-37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The claimed wavelength(s) in combination with the other limitations is the main reason the claims are allowable. The prior art consistently uses significantly greater wavelengths for such processes.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25-35, 38, 41, 43 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seiki, JP 10-288799.

Reference to the Seiki is given in terms of the English language translation already of record.

Figure 4 shows the three dimensional structure within a glass body. Most of the limitations are disclosed in paragraph [0016]. The relative motion limitation is at

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paragraph [0010] lines 8-10, and paragraph [0019], line. As to the homogenous, germanium free and with out a hydrogen loading step: none of these are taught by Seiki. It would have been obvious to use a glass that has these properties, because they would be cheaper to make/use than going through the effort of making them non-homogeneous, with germanium, or with loading of hydrogen. [0017] discloses various glasses that are not indicated as having germanium or hydrogen.

Claims 26-27: Seiki does not disclose the traversal of the core as claimed. However, Figure 7 demonstrates that one can produce a bent path. It would have been obvious to write the Seiki core from any location on the glass piece to any other location - depending upon what the artisan wants to create.

Claim 28: it would have been obvious to put as many paths as needed/desired in the Seiki glass for a multiplied effect.

Claim 29 requires a step of doping. It is deemed that the [0004] ion exchange is a doping with silver. It is deemed that the doping would occur homogeneously across the surface.

Claim 30: it would have been obvious to have the glass as uniform as possible, because if the glass had variations in compositions, it would likely have variations in properties, and one would want to have uniform predictable properties.

Claim 31: it would have been obvious to perform routine experimentation to determine the optimal transmission: one of ordinary skill would immediately realize that if the glass was to opaque, no light would get to the needed depth, and if the glass was

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too transparent, the laser light would simply pass through the glass without effecting the glass.

Claim 32-33: it would have been obvious to have the highest refractive index possible, so as to better guide the light in the core.

Claim 34: See [0016] line 4.

Claim 35: it would have been obvious to perform routine experimentation to determine what type of laser works best.

Claim 38: see fig 4.

Claim 41 and 43: it would have been obvious to have the path as deep or as shallow or as thick or as thin as desired depending upon what specific design parameters the artisan is working with.

Claim 47 is clearly met.

Claims 25-35, 38, 41, 43 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miura EP 0797112

Minura is meets the claim in essentially the same way as Seiki does: see above. The rejection is added particularly to address claim 26: see figure 4 of Miura.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The other Miura documents are cumulative to the Miura used in the rejection.

Response to Arguments

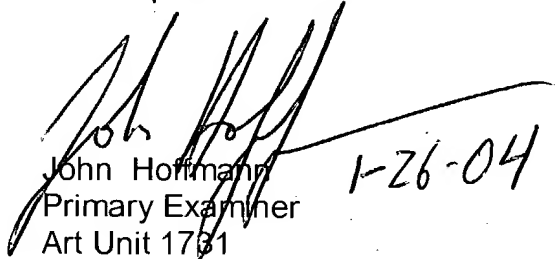
Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1700.


John Hoffmann
Primary Examiner
Art Unit 1731

1-26-04

jmh